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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/593,607	09/21/2006	Takeo Yajima	4724-0038WOUS	1929		
35301 MCCORMICK, PAULDING & HUBER LLP CITY PLACE II 185 ASYLUM STREET HARTFORD, CT 06103			EXAM	EXAMINER		
			HILTON	HILTON, ALBERT		
			ART UNIT	PAPER NUMBER		
			1716			
			MAIL DATE	DELIVERY MODE		
			04/22/2010	PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)	
10/593,607	YAJIMA, TAKEO	
Examiner	Art Unit	
Albert Hilton	1716	

	Albert Hilton	1716	
The MAILING DATE of this communication appe	ars on the cover sheet with the	correspondence add	ress
THE REPLY FILED 01 April 2010 FAILS TO PLACE THIS APP	LICATION IN CONDITION FOR A	LOWANCE.	
 X The reply was filed after a final rejection, but prior to or on application, applicant must timely file one of the following application in condition for allowance; (2) a Notice of Appe for Continued Examination (RCE) in compliance with 37 C periods: 	replies: (1) an amendment, affidavi eal (with appeal fee) in compliance	t, or other evidence, w with 37 CFR 41.31; or	hich places the (3) a Request
a) The period for reply expiresmonths from the mailing b) The period for reply expires on: (1) the mailing date of this no event, however, will the statutory period for reply expire to Examiner Note: If box 1 is checked, check either box (a) or [MONTHS OF THE FINAL REJECTION, See MPEP 766.07()).	dvisory Action, or (2) the date set forth ater than SIX MONTHS from the mailin b). ONLY CHECK BOX (b) WHEN THE	date of the final rejection	n.
Extensions of time may be obtained under 37 CFR 1.136(a). The date have been filled is the date for purposes of determining the period act under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Office let erray reduce any earned patient term adjustment. See 37 CFR 1.704(b). NOTICE OF APPEAL	on which the petition under 37 CFR 1.1 ension and the corresponding amount hortened statutory period for reply origi than three months after the mailing dat	of the fee. The appropria nally set in the final Offic	ate extension fee e action; or (2) as
 The Notice of Appeal was filed on A brief in comp filing the Notice of Appeal (37 CFR 41.37(a)), or any exter Notice of Appeal has been filed, any reply must be filed with AMELINATION. 	sion thereof (37 CFR 41.37(e)), to	avoid dismissal of the	
AMENDMENTS 3. ☐ The proposed amendment(s) filed after a final rejection, be (a) ☐ They raise new issues that would require further core	sideration and/or search (see NO		cause
 (b) ☐ They raise the issue of new matter (see NOTE belowing) (c) ☐ They are not deemed to place the application in better appeal; and/or 	ter form for appeal by materially re-		ne issues for
(d) ☐ They present additional claims without canceling a c NOTE: (See 37 CFR 1.116 and 41.33(a)).	corresponding number of finally reje	ected claims.	
4. The amendments are not in compliance with 37 CFR 1.12	21. See attached Notice of Non-Co	mpliant Amendment (f	PTOL-324).
5. Applicant's reply has overcome the following rejection(s):			
Newly proposed or amended claim(s) would be all non-allowable claim(s).		•	•
7. For purposes of appeal, the proposed amendment(s): a) [how the new or amended claims would be rejected is prov The status of the claim(s) is (or will be) as follows: Claim(s) allowed:		I be entered and an ex	xplanation of
Claim(s) objected to: Claim(s) rejected:			
Claim(s) withdrawn from consideration:			
AFFIDAVIT OR OTHER EVIDENCE 8. ☐ The affidavit or other evidence filed after a final action, but because applicant failed to provide a showing of good and was not earlier presented. See 37 CFR 1.116(e).			
The affidavit or other evidence filed after the date of filing entered because the affidavit or other evidence failed to o showing a good and sufficient reasons why it is necessary.	vercome <u>all</u> rejections under appear and was not earlier presented. Se	al and/or appellant fails se 37 CFR 41.33(d)(1)	s to provide a
10. The affidavit or other evidence is entered. An explanation REQUEST FOR RECONSIDERATION/OTHER		•	
The request for reconsideration has been considered but <u>See Continuation Sheet.</u>		condition for allowan	ce because:
Note the attached Information Disclosure Statement(s). (Other:	PTO/SB/08) Paper No(s)		
/Parviz Hassanzadeh/ Supervisory Patent Examiner, Art Unit 1716	/Albert Hilton/ Examiner, Art Unit 1716		

Continuation of 11, does NOT place the application in condition for allowance because:

- 1. Applicant argues that the supply-side valve (18) and outflow-side valve (19) are separate and dispersed components disposed away from the pump, rather being disposed in a nozzle assembly. Fajima (Japanese Patent No. JP-11230048) states that the supply-side valve (18) and outflow-side valve (19) are placed along the supply-side flow path (14) and outflow-side flow path (16), respectively, but is sitent as to the distance between these valves (18, 19) and the nozzle assembly (nousing 10) (Yajima; paragraphs 13-14 and Fig. 1). Simply making the components of an apparatus integral to an assembly does not distinguish the integrated assembly over the prior art in patentably distinct way (see MEPEP 214.04 V.). "making integral"). Absent any express teaching in Yajima to avoid placing the components in an integrated assembly, one of ordinary skill in the art at the time of the invention would have found it a prima facie design choice obvious to integrate the supply and outflow valves into a main assembly.
- 2. Applicant further argues that Kawata (US Patent No. 4932353) does not explain how a heat exchanger might be successfully incorporated into the pump of Yajima. In response to this argument, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference, nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In nr Keller, 642 F-2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, Kawata teaches the advantages of providing a heat exchanger along the entire flow path of the dispensed chemical (Kawata: col 3, lines 28-31).
- 3. Applicant argues that the addition of the heat exchanger of Kawata to the apparatus of Yajima would render Yajima's pump inoperable for its intended purpose. It is not clear to the examiner why the pump of Yajima would not function as intended within a heat exchanger. As noted in the previous office action (paragraph 17), the same design principle is used in Skidmore (US Patent No. 3738409), which teaches a pump (pump 21) placed within a heat exchanger (jacket 61) (Skidmore: col 3, lines 12-15 and Figs. 2-3).
- 4. Applicant argues that Kawata does not define where the "source" of chemical in the apparatus of Kawata is located or the "transport path" of the liquid, and that one of ordinary skill in the art would have placed the double tube of Kawata from the pump assembly to the nozzle. The examiner asserts that one of ordinary skill in the art would have understood the "source" of chemical to correspond to the tank (tank 15) of Yajima and the transport path to correspond to the path from said tank (15) to the nozzle (17). Said arisan would also appreciate that leaving a section of the chemical flow path without a heat exchanger would adversely allow the ambient temperature to affect the temperature of the dissensed liquid.
- Applicant further argues that Kawata teaches a triple tube rather than a double tube. The examiner asserts that the triple tube of Kawata comprises a double tube, and would still meet the limitations required by claim 9.